A Study on the Prevalence of Psychiatric Morbidities in the Last Trimester of Antenatal Mothers

Vidhya S[1], Vijay Anand Sivakumar[2], Santhosh Chakravarthy Parthasarathi[3], Anandha Krishnakumar[4]

[1]M.D.,D.N.B.,Psychiatry Assistant Professor, Department of Psychiatry ,Velammal Medical College Hospital and Research Institute, Madurai, Tamilnadu

[2]Associate Professor, Department of Emergency Medicine, Trichy SRM Medical College and Research Institute, Tamilnadu, India

[3]Assistant Professor, Department of General Medicine, Velammal Medical College and Hospital, Madurai, Tamilnadu

[4]Professor and Head, Department of Psychiatry, Madurai Medical College, Madurai, Tamilnadu

Abstract:

Background: In this study, we wanted to study the prevalence of psychiatric morbidities in the last trimester of antenatal mothers.

Methods: This was a hospital based cross sectional study conducted among 60 antenatal mothers in their last trimester - 28 to 39 completed weeks, age between 18 to 40yrs, attending antenatal clinic, Velammal Medical College and Hospital, Madurai, Tamil Nadu, over a period of six months after obtaining clearance from institutional ethics committee and written informed consent from the study participants.

Results: Multipara had a significantly higher prevalence of Generalised anxiety disorder and Dysthymic disorder and Primipara had a significantly higher prevalence of Depressive disorder.

Prevalence of Anxiety and Depressive disorder did not have a significant relationship in the antenatal period with the background of comorbid medical disorders. Prevalence of Psychiatric disorders was high with advancing age of the mother and with unwillingness of pregnancy but did not show relationship with of pregnancy. Significantly high anxiety and depressive symptoms correlated with increasing stressful life events and poorer marital quality. Mothers with previous obstretic and neonatal complications had a significantly higher prevalence of Psychiatric morbidities. Higher Neuroticism scores had significantly poorer quality of marital life.

Conclusion: Follow up study is needed to understand the progress of the Psychiatric morbidities into the postpartum period and the obstretic and neonatal outcomes. Also effect of early intervention in patients diagnosed with Psychiatric morbidities and the outcome of such interventions are also needed to be considered in the near future.

Keywords: Psychiatric Morbidities, Trimester, Antenatal Mothers.

Introduction

Pregnancy is a period in which major life events cluster, as women begin to adjust to a major life transition. The psychological and social changes that occur during pregnancy are linked to the symptoms of depression and anxiety. Though pregnancy is considered as a stressful event of a transient nature most of the research is focused mainly on the postpartum period.

Mental health problems of pregnant women are gaining attention with the aim of achieving the Millennium Development Goal 5 focussing on the concept of improving maternal health. The perinatal period is a time of increased physical and emotional demands and the disability associated with depression interferes with normal maternal and child care functional abilities. There are a lot of evidences suggesting that antenatal Mental health can be a precursor for subsequent Mental health problems.

Psychiatric morbidities in the antenatal period are more common in the first and third trimester, though some studies have quoted that there is a higher prevalence in second and third trimester [1]. Antenatal psychological problems are highly prevalent world over and prevalence of antenatal depression and anxiety range from 8 to 30%. From numerous meta-analysis, antenatal depression has been a strong predictor with 6.5 fold increase in postpartum depression with adverse obstetric and

fetal outcomes [2]. The research into the antenatal mental health had gained momentum only recently.

Aims and Objectives

- To study the prevalence of Psychiatric morbidities in the last trimester of antenatal period.
- To understand the relationship of Psychiatric morbidity and socio demographic and obstetric variables.
- To know the relationship between psychological symptoms and personality profile.
- To study the relationship of psychosocial stressors on the psychological symptoms.

Methods

This was a hospital based cross sectional study conducted among 60 antenatal mothers in their last trimester - 28 to 39 completed weeks, age between 18 to 40yrs, attending antenatal clinic, Velammal Medical College and Hospital, Madurai, Tamil Nadu, over a period of six months after obtaining clearance from institutional ethics committee and written informed consent from the study participants.

Inclusion Criteria

- Antenatal mothers in their last trimester - 28 to 39 completed weeks
- Age between 18-40yrs
- Ability to give informed consent

Exclusion criteria:

- Patients with obstetric emergencies like eclampsia, antepartum hemorrhage.
- Patient's with comorbid severe medical illness like late stage heart disease in failure
- Mentally retarded mothers
- Patients who did not consent for the study.

Statistical Methods

In comparison of the data for categorical variables chi-square and for numerical variables student t test were used.

For multiple comparisons of more than two numerical variables, ANOVA and Scheffe post hoc tests were used.

Results

Table 1:

Sl.no	Variables		Psychiatric Morbidity		X2 Value
			Absent	**Present**	
			n=	n	
1	Age	<24	11	2	12.359
		24-29	28	6	
		>30	7	6	
2	Parity	Primi	30	7	9.814*
		Multi	16	7	
3	Domicile	Rural	16	8	4.39
		Urban	30	6	
4	Education	Primary	5	4	12.666*
		Secondary	17	6	
		Graduate	24	4	
5	Occupation	House Wife	40	11	19.775*
		Unskilled	0	1	
		Semi-Skilled	2	1	
		Skilled	4	1	
Psychiatric morbidity in relation to sociodemographic variables of the patient					
**. p value is significant at the 0.01 level, *p value is significant at the 0.05 level.					
Sl. No	Variables		Psychiatric Morbidity		X2 Value
			Present	**Absent**	
1	Family Type	Nuclear	8	21	2.93
		Joint	5	21	
		Extended	1	4	
2	SES Score	Upper Middle	0	1	6.709
		Middle	4	27	
		Upper Lower	9	15	
		Lower	1	3	
3	Duration of Marriage	Below 2 Yrs	5	22	8.979
		3 To 5 Yrs	3	14	
		Above 5yrs	6	10	
4	Family History Of Mental Illness	Present	6	5	10.770*
		Absent	8	41	

Psychiatric morbidity in relation to family variables:
P value is significant at the 0.01 level, *p value is significant at the 0.05 level.

Depression was seen in all age groups and generalized anxiety disorder and dysthymia were seen in age groups more than 24. Depression was common in primiparous women and dysthymia was seen in 2 of the multiparous women while generalized anxiety was present in both primi and multiparous women. On statistical analysis generalized anxiety disorders and dysthymic disorders were significantly higher in multigravida and major depressive disorder significantly high in primigravida. There is no significant differences in

Psychiatric morbidity with reference to domicile and occupation but significant relationship obtained in patients with Primary education who had a high Psychiatric morbidity in comparison with higher education. The relationship between the Psychiatric morbidities and the family related variables including type of family, socioeconomic status and duration of marriage which did not show significant relationship. There is a significant relation found with presence of family history of mental illness and Psychiatric morbidity.

Table 2:

Sl. No	Variables		Psychiatric morbidity		X2 value
			Absent	Present	
1	Planning Of Present Pregnancy	Yes	35	8	1.967
		No	11	8	
2	Willingness Of Present Pregnancy	Yes	44	10	8.427*
		No	2	4	
3	Medical Complications	Absent	29	9	12.728
		Diabetes	8	1	
		Hypertension	2	0	
		Heart Disease	1	1	
		Anaemia	3	2	
		Others	3	1	
4	Preference Of Sex Of Child	Yes	28	7	4.107
		No	18	7	
5	Fear Of Child Birth	Yes	21	8	1.769
		No	2	6	
Psychiatric morbidity in relation to the obstretic variables:					
**. P value is significant at the 0.01 level, *p value is significant at the 0.05 level.					
S. No	Variables		Psychiatric Morbidity		x2 value
			Present	Absent	
1	Past History Of Mental Illness	Yes	5	7	1.718
		No	13	39	
2	Past History Of Obstetric Complications	Not Applicable	7	30	13.128*
		Yes	2	9	
		No	5	7	
3	Neonatal Complications	Not Applicable	7	30	18.309*
		Yes	4	2	
		No	6	14	
Relation between past obstretic variables and psychiatric morbidity					
**. pvalue is significant at the 0.01 level, *p value is significant at the 0.05 level.					
S. No	Variable	Mini Diagnosis	Mean	S.D	F Value	Post Hoc Test
1	Age	Nil	25.96	4.027	3.266*	
		MDD	24.4	4.615		
		DYSTHYMIA	32.5	3.536		
		GAD	29.43	4.65		
2	Life Events Score	Nil	526.85	204.09	3.428*	1&2*
		MDD	795.4	109.114		
		DYSTHYMIA	469	243.245		
		GAD	473.43	101.553		
3	Life Events Number	Nil	13.39	4.865	2.423	
		MDD	18.2	2.95		
		DYSTHYMIA	10.5	4.95		

		GAD	11.71	2.628		
Association between age, life events and their score with psychiatric morbidities						
* The mean difference is significant at the .05 level						

The relation between the current obstretic variables with the various Psychiatric illnesses of pregnancy, medical complications associated with pregnancy, preference of sex and fear of childbirth did not show any significant relation with Psychiatric morbidity. But there a significant relationship has been found with Psychiatric morbidity and patients who are unwilling to continue their pregnancy.

The relation between past obstretic variables including past history of mental illnesses, obstretic and neonatal complications. Significant relationship has been found in multigravida pertaining to Psychiatric morbidity with previous pregnancy associated with obstretic and neonatal complications but no statistical significance has been found with past history mental illness and current Psychiatric morbidity. The association between various Psychiatric illnesses in relation to age of the patient and life events number and scoring.

The mean age of patients was highest in patients with Dysthymia (32.5 yrs) and lowest for those with major depression (24.4yrs) and there was a significant relationship obtained with advancing age increases Psychiatric morbidity. There was also a highly significant relationship with Major Depressive Disorder and Life events scoring. No such relationship had been made on comparing number of stressful life events and Psychiatric morbidity.

Table 3: Comparing HADS Score with Current Obstretic Variables

Sl. No	Variables		HADS DEP			HADS ANX		
			Mean	S.D	F Value	Mean	S.D	F Value
1	of Pregnancy	Yes	5.72	3.654	0.979	7.8	3.654	0.037
		No	5.41	4.139		7.12	4.139	
2	Preference of Sex	Yes	5.69	3.771	0.02	7.86	3.813	0.748
		No	5.56	3.831		7.32	4.479	
3	Fear of Childbirth	Yes	5.41	3.480	2.074	8.24	4.381	2.211
		No	5.84	4.059		7.06	3.750	

The relationship between the various obstretic variables and the prevalence of depression and Anxiety symptoms but none of the variables namely, of pregnancy, preference of sex and fear of child birth had been found to have significant high scores of depression and anxiety symptoms.

Table 4: Relation between Marital Quality Score and MQS

Sl.no	Variable	Mean	F Value	POSTHOC Test
HADS-Depression Score	Low MQS	3.38	3.704*	1&3, 3&1
	Moderate MQS	5.91		
	High MQS	7		
HADS-Anxiety Score	Low MQS	5.08	4.366*	1&3,3&1
	Moderate MQS	7.88		
	High MQS	9.33		

* The mean difference is significant at the .05 level.

The mean score for marital quality scale in each of the 3 groups with respect to HADS depression is 3.38, 5.91, and 7 respectively for the low, moderate and high groups. Similarly in relation to HADS Anxiety was 5.08, 7.88 and 9.33 in that order. Based on the ANOVA test, the F value was found to be statistically significant with respect to poor marital quality and the Depressive symptoms and poor marital quality and anxiety symptoms.

Table 5: Correlation Matrix

	Age	Life Events No.	Life Events Scor	HADS DEP	HADS ANX	NEO: N	NEO EXT	NEOFFI: O	NEOFFI: AGR	NEOFFI: CON	MQS TOTAL
Age	#										
Life Event No.	0.196	#									
Life Even SCOR	0.177	.96**	#								

HADS-DEP	0.038	0.193	.308*	#							
HADSANXITEY	0.163	0.101	0.129	.362**	#						
NEO: N	0.146	0.241	0.247	0.163	0.073	#					
NEO: EXT	0.063	0.112	0.101	0.025	0.067	.280*	#				
NEO:O	0.204	0.207	0.211	0.039	0.149	0.097	0.228	#			
NEO:A	0.154	0.172	0.128	0.019	0.031	0.042	0.228	0.050	#		
NEO: C	0.099	0.230	0.233	0.142	0.048	0.112	0.148	0.204	0.140	#	
MQS: TOTAL	0.001	0.250	.268*	0.235	0.244	.361**	0.171	0.233	0.068	0.228	#

**. Correlation is significant at the 0.01 level. *. Correlation is significant at the 0.05 level

The correlation between various variables in the study.

1. The age of the patient did not have any influence over any of the variables considered in the study.

2. With increase in life events score there is a significant increase in depressive symptomatology.

3. there was no significant correlation between the Neuroticism score in NEOFFI personality with any of the variables.

4. However as with increasing scores in Extroversion subdomain of personality there was statistically significant increase in the Neuroticism subdomain

5. there was no significant correlation between any of the subdomains of the personality with any of the independent variables taken up in the study.

6. While considering the Marital Quality total score, with poorer Marital Quality there was statistically significant increase in Neuroticism scores

7. As with increasing scores in Marital Quality, there was statistically significant positive correlation with life events scores suggesting more stressful life events significantly reduces marital quality.

8. On further statistical analysis of 12 subdomains of marital quality scores, higher Neuroticism had been significantly associated with poor understanding and satisfaction and higher rejection and despair. Increase in stressful life events had significantly high depressive symptoms poorer understanding and more rejection. Significantly higher anxiety symptoms were correlated with despair, affection, dominance and discontent.

Discussion

Prevenance of Psychiatric Morbidity: On studying the major Psychiatric morbidities among the study population around 14 patients out of 60 were diagnosed to have illness constituting around 23.3% of the total study population. Among those cases, Generalized Anxiety disorder was diagnosed to be the most common Psychiatric illness in about 11.7% patients of study population followed by Major Depression was diagnosed in 8.3% of patients and Dysthymia diagnosed in 2 patients. From this study the Generalised Anxiety disorder was found to be most common Psychiatric illness followed by Major Depression which were in contrast to the various studies done in antenatal mothers which found that Depression to be the common illness including the study by Sawyer et al in African mothers. [3]

In order to identify the subsyndromal symptoms of depression and anxiety which is more common than the syndromal pattern of Psychiatric illnesses, Hospital Anxiety and Depression scale was applied to identify anxiety and depressive symptoms.

Based on the HADS depression score, 75% of study population falls under normal category and 16.7% had abnormally high depressive scores.

On analyses of HADS Anxiety scores, around 56.7% of study population falls under normal category and 25% had abnormally high anxiety scores.

Relation between Psychiatric Morbidity and the Sociodemographic Variables: The various sociodemographic variables were studied in relation to the independent Psychiatric illnesses and statistical tests were applied.

Among the Psychiatric morbidities, Major depression was seen in all age groups and GAD and dysthymia were seen in age groups more than 24. The mean age of patients was highest in patients with Dysthymia (32.5 yrs) and lowest for those with major depression (24.4yrs). On applying the ANOVA, there was a significant relationship found between the advancing age in relation to the

Psychiatric morbidity in contrast to the various studies which had shown that younger age is a risk factor for depression. [4,5,6,7]

However this was in accordance with the study done by Zeng et al who studied that younger age was a significant protective factor against antenatal depression. [8]

While analyzing the relationship between parity and presence of illness, Depression was common in primiparous women and dysthymia was seen in 2 of the multiparous women while GAD was present in both primi and multiparous women. There has been a significant higher prevalence of Generalised Anxiety Disorder and dysthymic disorder in multipara and higher prevalence of Major depression in primiparous women. This finding is in contrast to the previous studies which showed that depression is more common in multiparous women than in primiparous women. [9]

Among the patients from rural area all 3 types of Psychiatric illnesses were present while depression and GAD were seen in urban population. However there was no statistical significance in relation to the domicilary and Psychiatric illnesses.

On analyzing the relationship between Psychiatric illnesses and education it was inferred that patients with primary education had significant higher prevalence of Psychiatric illnesses.

On comparison of occupational status and Psychiatric morbidity GAD was present only in housewives while depression was seen in 3 groups except skilled labourers. However there was no significant difference in the presence and absence of Psychiatric morbidity in relation to occupational status of the pregnant mothers. Based on Modified Kuppusamy's socioeconomic status classification most of the study population came in the middle and upper lower category and the highest number of patients with Psychiatric illness were in the upper lower category followed by middle socioeconmis status. This is in accordance to various findings that lower education and lower socioeicionomic status contributed to and is a risk factor for development of depression and anxiety in the antenatal period. [10] But there was no statistically significant difference between the different socioeconomic groups and the Psychiatric morbidities.

Psychiatric Morbidities and Sociodemographic Variables of Husband: Higher age group of the husband i.e., more than 24 yrs was associated with more number of illnesses however it was not statistically significant. The education and occupation of the husband was also not significant to the presence of Psychiatric illness though the presence of illnesses were distributed more among husbands with both primary and secondary education and who were in semi-skilled and skilled

occupations. This is in accordance to the various studies which identified that lower socioeconomic status contributed by the education and occupation of the husband was a risk factor development of antenatal Psychiatric illnesses.

In this study the substance use in the husband was studied as an independent variable and its influence on the development of Psychiatric illnesses in pregnant women was studied and it was found that the presence of substance abuse was equally distributed between pregnant women with and without Psychiatric illness but was not statistically significant.

No significant association was found with the presence of medical and mental illnesses in the husband with the prevalence of Psychiatric morbidities in the study population.

Relation between Family and Obstretic Variables: Majority of the study population were in a nuclear family in which 8 had Psychiatric illnesses. Next major group were in joint family (26 out 60) out of which 5 had illnesses. 1 out 5 in extended family had a Psychiatric illness but there was no significance between the type of family and the presence of Psychiatric illness.

While considering the duration of marriage, about 5 patients with Psychiatric illnesses were within 2 yrs of marriage and 6 were married more than 5 years and duration of marriage did not have a statistical significance with the presence of Psychiatric illness. Family history of mental illness was present in total of 11 patients and 5 had Psychiatric illnesses and 6 without illnesses and it was statistically significant which was confirmed by previous studies.

Among the 17 unplanned pregnancies (28%) Psychiatric illnesses was present in 8 pregnancies in which 3 had depression, 4 of them had GAD and 1 had dysthymia ,however there was no statistical significance between of pregnancy and the presence or absence of Psychiatric illness.

Irrespective of the planning status, 6 of the mothers expressed unwillingness in continuing their pregnancy. Out of the 6, depression, GAD and dysthymia was seen inpatie and in mothers who wanted to continue their pregnancy depression was seen in 4 mothers and GAD in 5 mothers. The relationship between willingness of pregnancy and the presence of Psychiatric illnesses was statistically significant suggesting unwillingness in pregnancy significantly increases the risk of Psychiatric morbidity. These findings were in contrast to the Iranian study done by Iranfar et al who concluded that antenatal depression was slightly higher in unintended pregnancies.

Regarding the medical complications during pregnancy, twenty two had medical complications. 14 out of 22 had Psychiatric morbidities with

depression seen in almost all groups and majority of patients diagnosed with generalised anxiety disorder did not have medical complications. However no statistically significant difference between the groups with or without Psychiatric illness and pattern of Psychiatric illness which is in contrast with the previous studies which had shown that medical disorders complicating pregnancy are significant risk factors for the development of antenatal depression.

Around 35 pregnant women had a preference for sex of their unborn child out which 7 had Psychiatric illness which was not statistically significant. Fear of childbirth was present in 29 out of 60 women and 8 had Psychiatric illness with GAD being common than depression and dysthymia. However there was no statistical significance observed between fear of childbirth and prevalence of Psychiatric illness.

8 patients had a past history of mental illness and 1 among them was diagnosed to have Depression which was not statistically significant. While analyzing the presence of obstretic complications in the previous pregnancy, among the 23 multiparous women, 11 had a history of obstretic complication in the previous pregnancies. 2 out of them had Psychiatric illness which was statistically significant. Out of the 23 multiparous women, 6 had neonatal complications in the past pregnancies and among them 4 are diagnosed with Psychiatric illness and this variable also shows same trend of statistical significance.

Relation between Life Events:

Among the study population majority of them classified under severe stress. Among the 45 patients, GAD was common (11.7%) than depression (8.3%) and there was no statistical significance was observed between the patients with and without Psychiatric illness in relation to life stressors. The mean number of life events was around 14 among the patients with and without Psychiatric illness. There was no statistically significant difference observed between the life events number and life events scoring with and without Psychiatric morbidities. While studying the relation of life events with respect to the individual disorders, the mean life event score was highest for the patients with depression than GAD and dysthymia and was found to have significant relationship. This finding was confirmatory with the previous studies findings that adverse life events were associated with antenatal depression [11]

With respect to number of stressful life event, the mean number were highest for patients with depression followed by GAD and their relationship did not show significant association and hence concluded that the life events number does not have a significant difference with risk of precipitating to the various Psychiatric illnesses.

Personality with Psychiatric Morbidity

The NEOFFI personality questionnaire was used in the study which has 5 subdomains. The scores in each subdomain are grouped into 5 grades from very low to very high. In our study, in the Neuroticism group, 4 patients with generalised anxiety disorder and 4 patients with depressive disorder had average scores. The mean score for Neuroticism was high for depressive disorder. There was no statistically significant difference in relation to neuroticism and Psychiatric illness. These findings were in contrast to previous studies that high degree of neuroticism was significantly associated with antenatal depression and anxiety. [12] While in the Extroversion group, 5 patients with depression and GAD each had average scores. The mean score for Extroversion was maximum for dysthymia followed by depression and GAD. No significant difference was observed.

On studying the Openness group, 5 patients with GAD 2 dysthymic patients and 2 depressive patients had high scores. The highest mean was for depression and lowest for GAD and for Agreeableness grouping, 4 patients with depression scored in very high range. In the Concentiousness subdomain mean score was highest for GAD. However there was no statistically significant difference between each subdomain of personality profile and the presence or absence of Psychiatric morbidities. The previous studies had found that high degree of neuroticism correlates with recurrence of depression and antenatal Psychiatric illnesses [13]

Marital Quality Score and Psychiatric Illness:

The total marital quality score was divided into 3 groups based on quartile divisions into low, moderate and high. Higher the MQS scoring indicates poorer quality. 13 patients in low group, 36 in the moderate group and 15 in high group. 6 out of 7 GAD patients had moderate scores and 1 had high score. The patients with depression and dysthymia were equally distributed in the moderate and high scoring. The mean score of MQS to be maximum for dysthymia followed by depression and GAD. However the differences in Marital quality score with respect to the different Psychiatric disorders do not show statistical relationship. This findings in our study were in contrast to various other studies which showed that low marital quality was significant risk factor for developing antenatal Psychiatric illness.[14,15,16,17,18]

Psychological Symptoms

The study population were classified into 3 groups based on their scores in Hospital Anxiety and Depression scores as normal, borderline and abnormal. About 45 mothers that is around 75% scored in the normal range of the HADS

DEPRESSION scale and about 16.7% scored abnormal values. Similarly out of 60 mothers, 56.7% were in the normal range in HADS Anxiety scale while almost 25% scored abnormal in the anxiety scales.

Relationship between the various obstretic variables and the HADS score:

The mean score for pregnancy among those with the 17 unplanned pregnancy was 5.41 in HADS Depression scale and those for HADS Anxiety was 7.12. There was no significant relation between the of Pregnancy and HADS Depression and Anxiety scores. The other two variables namely preference of sex and fear of childbirth did not have any significant relation to anxiety and depressive symptoms.

On studying the medical disorders complicating pregnancy in relation to the anxiety and depressive symptoms, there was no significant relation between the two was observed. There was statistically significant difference with respect to the marital quality score and the HADS Depression score suggesting that poorer the marital quality significantly higher was the depressive symptoms. Similarly poorer marital quality was significantly associated with higher anxiety symptoms.

In our study, correlation between various variables were studied which revealed the following findings. The age and personality profile of the patient did not have any influence over any of the variables considered in the study. Significant increase in life events was associated with increase in depressive symptoms, poorer marital quality with poor understanding and more rejection. High Neuroticism scores were significantly associated with high Extroversion scores, poor marital quality, poor understanding and satisfaction and higher rates of rejection and despair. Significantly higher anxiety symptoms were correlated with despair, affection, dominance and discontent.

Thus based on the analysis of the variables our study showed that advancing age had increased prevalence of Psychiatric morbidity and multipara had more Psychiatric morbidities. Primary education and unwillingness of pregnancy increased risk of developing Psychiatric morbidities. Past history of obstretic and neonatal complications associated with increased risk of Psychiatric morbidities as with Family history mental illness. More stressful life events scores associated with Psychiatric morbidities. The overall prevalence of Psychiatric morbidity was 23.3% with the Generalised Anxiety disorder being the most common Psychiatric morbidity. The depressive and anxiety symptoms were significantly associated with poor marital quality and more stressful life events were significantly associated with more depressive symptoms.

The personality profile did not have a significant relation with both the Psychiatric morbidity and psychological symptoms and higher Neuroticism was associated with poor marital quality.

Conclusion

Multipara had a significantly higher prevalence of Generalised anxiety disorder and Dysthymic disorder and Primipara had a significantly higher prevalence of Depressive disorder. Prevalence of Anxiety and Depressive disorder didnot has a significant relationship in the antenatal period with the background of comorbid medical disorders. Prevalence of Psychiatric disorders was high with advancing age of the mother and with unwillingness of pregnancy but did not show relationship with of pregnancy. Significantly high anxiety and depressive symptoms correlated with increasing stressful life events and poorer marital quality. Mothers with previous obstretic and neonatal complications had a significantly higher prevalence of Psychiatric morbidities. Higher Neuroticism scores had significantly poorer quality of marital life.

References

1. Christina George1, Anoop RN Lalitha1, Abish Antony1, Arun V Kumar1 and KSJacob, International Journal of Social Psychiatry 1–7, Antenatal depression in coastalSouth India: Prevalence and risk factors in the community.

2. Sheila M. Marcus,Depression during Pregnancy: Rates, Risks and Consequences Canadia Journal Clinical Pharmacology Vol 16 (1) Winter 2009:e15 -e22; January 22, 2009.

3. Sawyer A1, Ayers S, Smith H.Pre- and postnatal psychological wellbeing in Africa: a systematic review. Journal of Affective Disorder. 2010 Jun; 123(1-3):17-29. doi: 10.1016/j.jad.2009.06.027.

4. Sharma Santvana, Sonawalla Shamsah, Parikh Firuza, Parikh Rajesh; Psychiatric disorders associated with pregnancy, Journal of Obstetrics and Gynecology India Vol. 55, No. 3 : May/June 2005 Pg 218-227.

5. Shaunak Ajinkya, Pradeep R. Jadhav, Nimisha N. Srivastava;Depression during pregnancy: Prevalence and obstetric risk factors among pregnant women attending a tertiary care hospital in Navi Mumbai,Industrial psychiatry Journal, Jan-Jun 2013 | Vol22 | Issue 1

6. NICE clinical guideline 192, Antenatal and postnatal mental health: clinical management and service guidance;Issued: December 2014 last modified: June 2015 ;

7. Scottish Intercollegiate Guidelines Network; Management of perinatal mood disorders, A national clinical guideline, Edinburgh:SIGN; 2012.(SIGN publication no.127). [March 2012].

8. Yingchun Zeng, Ying Cui and Jie Li, Prevalence and predictors of antenatal depressive symptoms among Chinese women in their third trimester: a cross-sectional survey; BMC Psychiatry (2015) 15:66 DOI 10.1186/s12888-015-0452-7.

9. Margarita Saʹenz-Herrero, Psychopathology in Women; Incorporating Gender Perspective into Descriptive Psychopathology.

10. Niloufer S. Ali, Iqbal S. Azam, Badar S. Ali, Ghurnata Tabbusum, and Sana S. Moin. Sharma; Frequency and Associated Factors for Anxiety and Depression in Pregnant Women: A Hospital-Based Cross-Sectional Study; The Scientific World Journal Volume 2012, Article ID 653098, 9 pages doi:10.1100/2012/653098.

11. Roberta Anniverno, Alessandra Bramante, Claudio Mencacci and Federico Durbano ,Anxiety Disorders in Pregnancy and the Postpartum Period, http://dx.doi.org/ 10.5772/52786

12. Yu-ting Kang, Yan Yao, Jing Dou, Xin Guo , Shu-yue Li , Cai-ning Zhao , Hong-zhi Han and Bo Li; Prevalence and Risk Factors of Maternal Anxiety in Late Pregnancy in China: International Journal of Environmental Research and Public Health.

13. Carlos Berlanga, M.D. Gerardo Heinze, M.D. Marina Torres, M.D. Rogelio Apiquián, M.D. Alejandro Caballero, M.D. ; Personality and Clinical Predictors of Recurrence of Depression ; Psychiatric Services, March 1999 Vol. 50 No. 3.

14. Report of the WHO-UNFPA meeting held in Geneva, Switzerland, Maternal Mental health and child health and development in low and middle income countries -30 January - 1 February, 2008.

15. Chui Yi Chan, Antoinette Marie Lee, Siu Keung Lam, Chin Peng Lee, Kwok Yin Leung, Yee Woen Koh, Catherine So Kum Tang, Antenatal anxiety in the first trimester: Risk factors and effects on anxiety and depression in the third trimester and 6-week postpartum, Open Journal of Psychiatry, 2013, 3, 301-310.

16. Chutima Roomruangwong, C. Neill Epperson; review article, Perinatal depression in Asian women: prevalence, associated factors, and cultural aspects; Asian BiomedicineVol. 5 No. 2 April 2011; 179 - 193 DOI: 10.5372/1905-7415.0502.024.

17. Mina Malary, Zohreh Shahhosseini, Mehdi Pourasghar, Zeinab Hamzehgardeshi, Couples Communication Skills and Anxiety of Pregnancy: A Narrative Review, Mater Sociomed. 2015 Aug; 27(4): 286-290.

18. Shuang Ji, Qi Long, D. Jeffrey Newport, Hyeji Na, Bettina Knight, Elizabeth B. Zach, Natalie J. Morris, Michael Kutner, and Zachary N. Stowe, Validity of Depression Rating Scales during Pregnancy and the Postpartum Period: Impact of Trimester and Parity, Journal of Psychiatric Research. 2011 February; 45(2): 213–219.